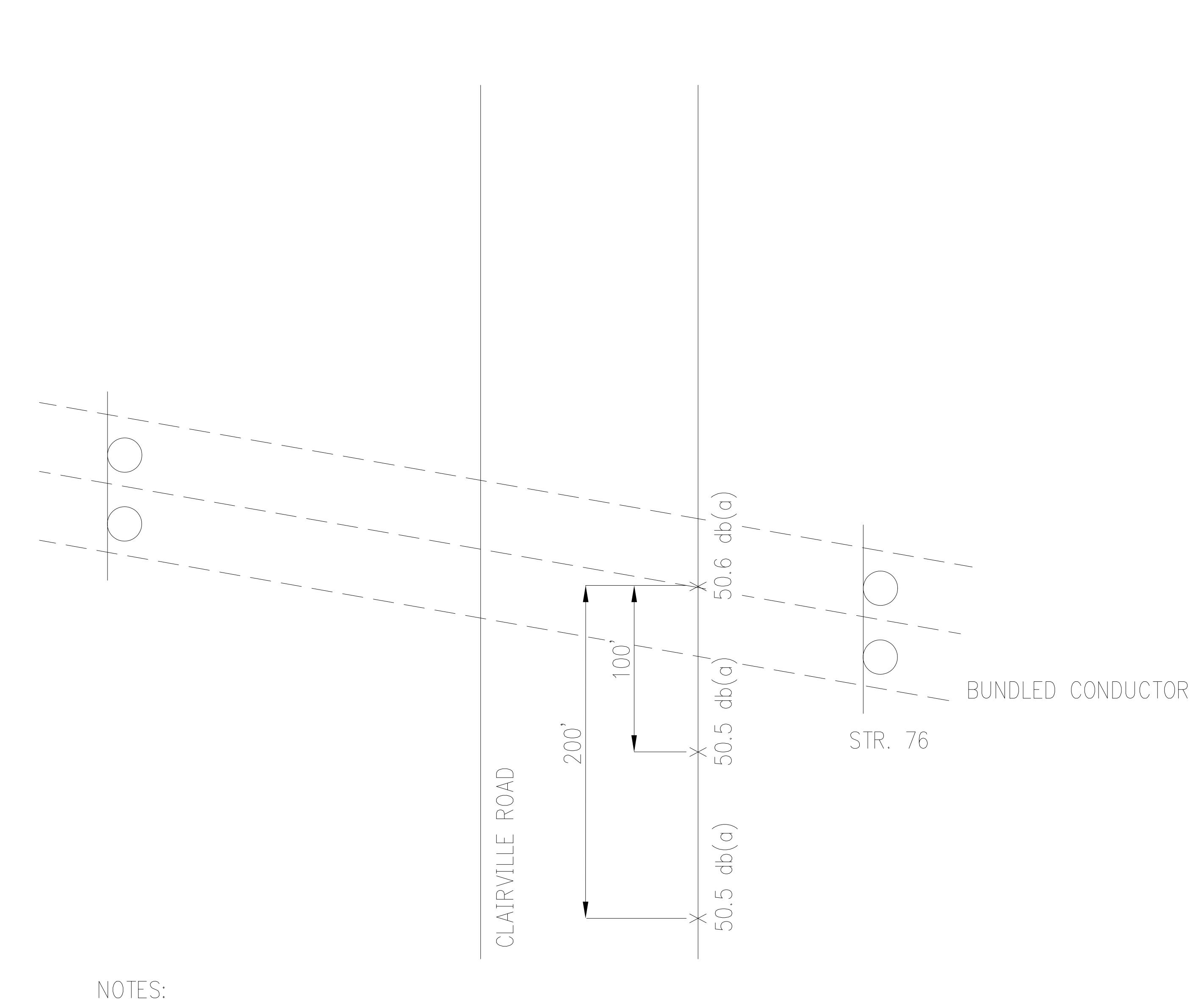


ARROWHEAD-WESTON
TRANSMISSION PROJECT

FIGURE A28-1

ARPIN SUBSTATION
NOISE MEASUREMENTS



NOTES:

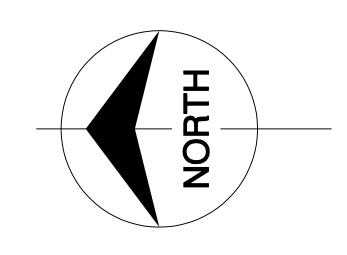
Location: Near Ring, WI Conditions: Sunny with thin occasional clouds, wind 3-5 mph.

Equipment: Equipment was pre and post calibrated to 110 db(a). A background noise measurement was established by taking a measurement approximately one mile east of the transmission line. The background noise was found to be 50.5 db(a).

There were no crops in the nearby fields. Background noise was limited to intermittent bird noise. No traffic was present during the measurement period.

Occasional perceptible noise from line at centerline and 100 ft. At 200 ft. the noise could no longer be heard.

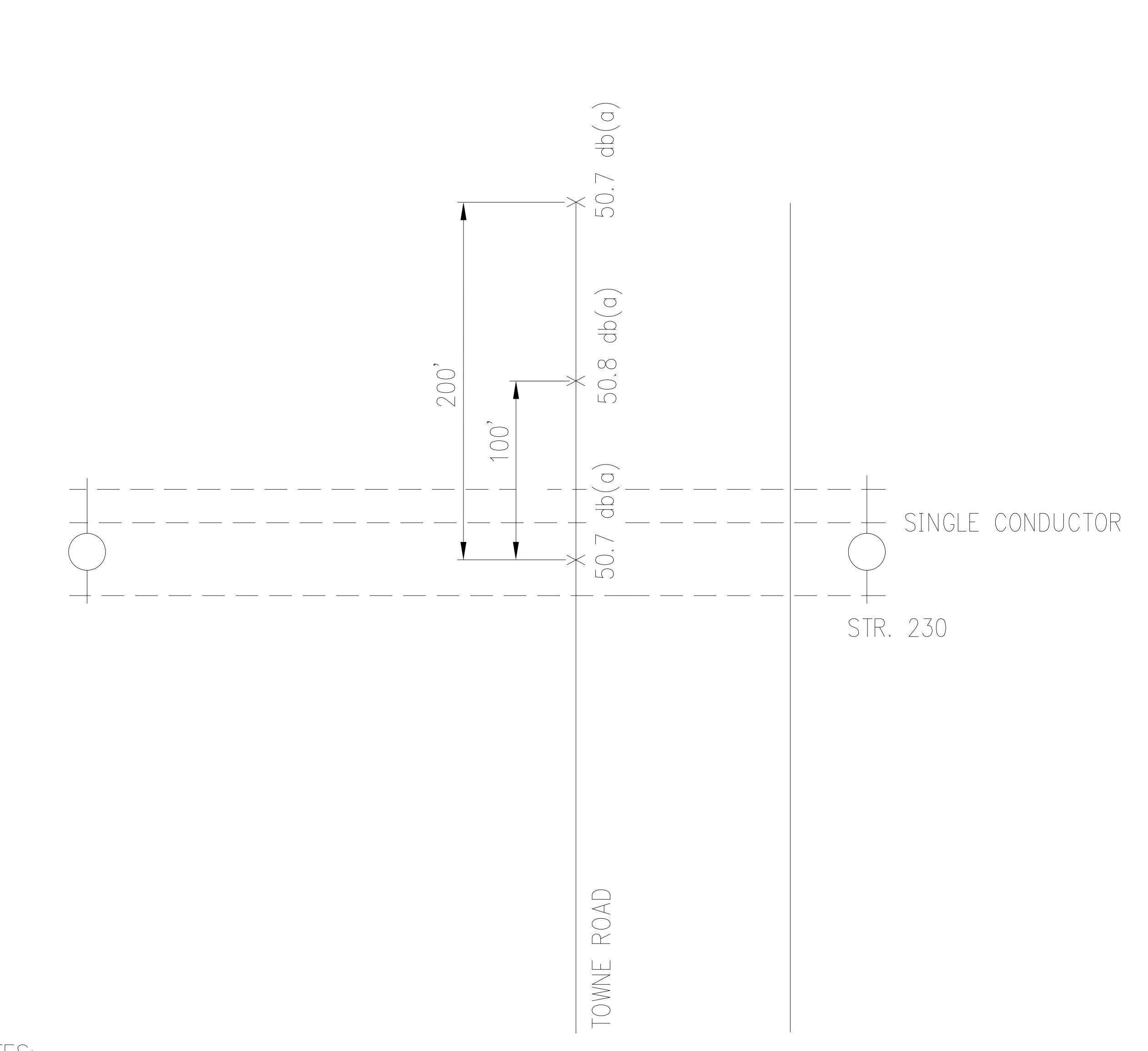
DATE: 10/21/99 9:34 a.m.



NOT TO SCALE

ARROWHEAD-WESTON TRANSMISSION PROJECT FIGURE A28-2

NOISE MEASUREMENTS 345-KV H-FRAME SINGLE CIRCUIT



NOTES:

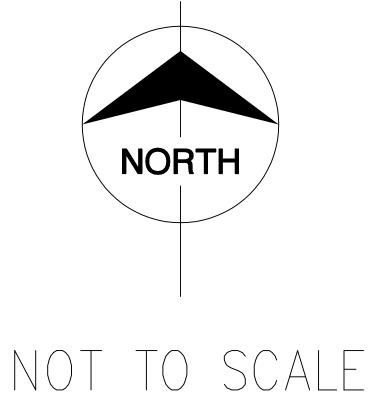
Location: Near Ladoga, WI Conditions: Sunny with thin occasional clouds, wind 4-6 mph.

Equipment: Equipment was pre and post calibrated to 110 db(a). A background noise measurement was established by taking a measurement approximately one mile north of the transmission line. The background noise was found to be 50.6 db(a).

There were no crops in the nearby fields. Background noise was limited to intermittent bird noise, and a tractor operating about a half mile from the transmission line. No traffic was present during the measurement period.

Constant perceptible noise from the line at all three locations. It became lighter with increasing distance. At 200 feet blended in with the background noise.

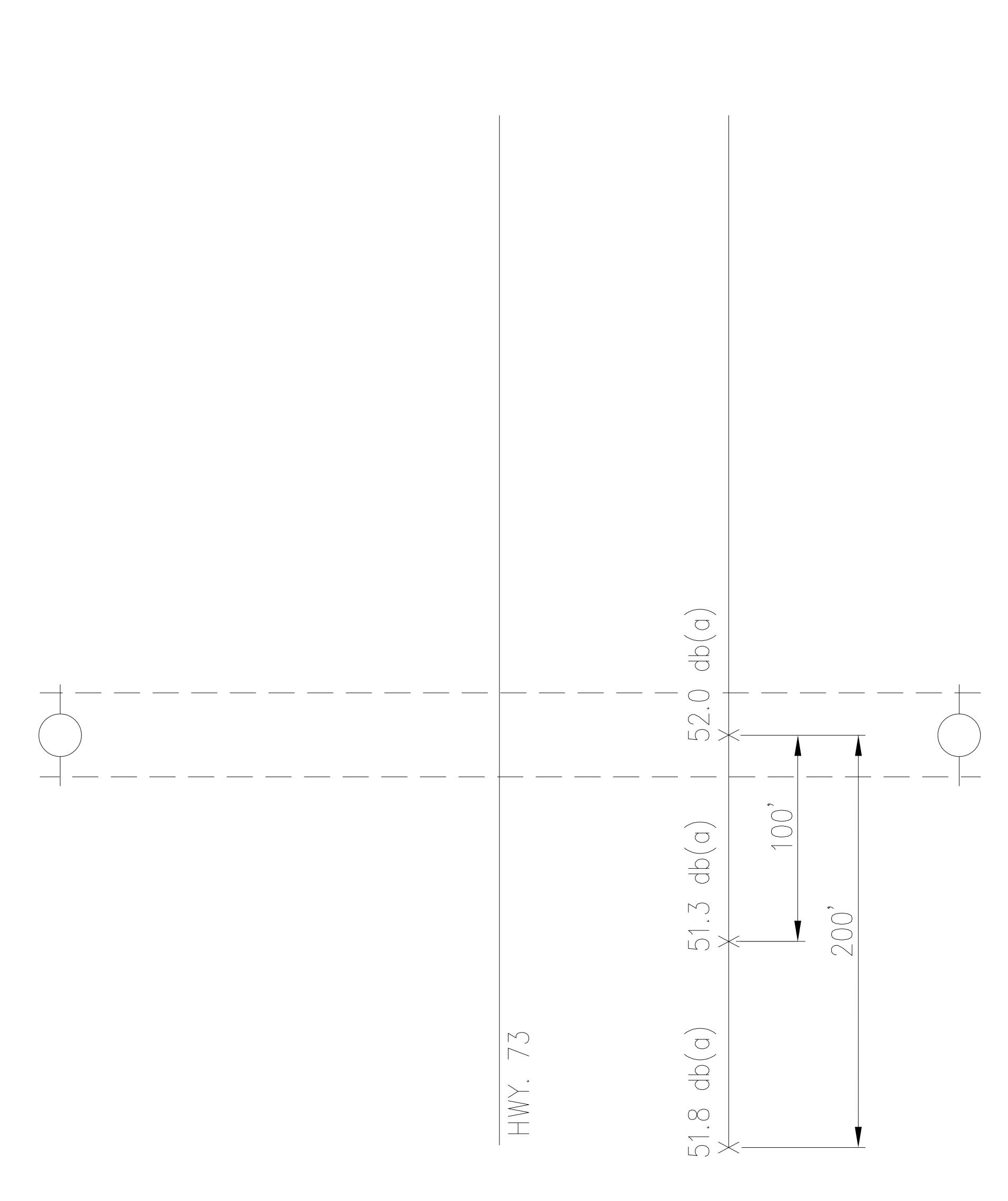
DATE: 10/21/99 11:00 a.m.



ARROWHEAD-WESTON
TRANSMISSION PROJECT

FIGURE A28-3
ISE MEASUREME

NOISE MEASUREMENTS
345-KV
SINGLE POLE
SINGLE CIRCUIT



NOTES:

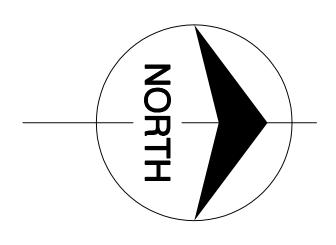
Location: Near Columbus, WI Conditions: Sunny day, wind 4-6 mph

Equipment: Equipment was pre and post calibrated to 110 db(a). A background noise measurement was established by taking a measurement approximately one half mile west of the transmission line. The background noise was found to be 51.2 db(a).

There was corn in the nearby fields. Background noise was limited to intermittent bird noise, traffic from highway 151 which is located approximately one half mile from the site. No traffic was present, at the sampling site, during the measurement period.

Constant perceptible noise from the line at the center line and 100 feet from the center line. At 200 feet it was no longer perceptible.

Date: 10/21/99 12:20 p.m.



NOT TO SCALE

ARROWHEAD-WESTON
TRANSMISSION PROJECT

FIGURE A28-4

NOISE MEASUREMENTS
345/138-KV
SINGLE POLE
DOUBLE CIRCUIT